

west virginia department of environmental protection

Office of Oil and Gas 601 57th Street SE Charleston, WV 25304 (304) 926-0450 (304) 926-0452 fax Earl Ray Tomblin, Governor Randy C. Huffman, Cabinet Secretary www.dep.wv.gov

January 06, 2014

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-9500566, issued to TRIAD HUNTER, LLC, is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to all conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas inspector.

Upon completion of the plugging well work, the above named operator will reclaim the site according to the provisions of WV Code 22-6-30. The above named operator will also file, as required in WV Code 22-6-23, an affidavit on form WR-38 by two experienced persons in the operator's employment and the Oil and Gas inspector that the work authorized under this permit was performed and a description given. Failure to abide by all statutory and regulatory provisions governing all duties and operations here under may result in suspensions or revocation of this permit and in addition may result in civil and/or criminal penalities being imposed upon the operator.

This permit will expire in two (2) years from date of issue. If there are any questions,

please free to contact me at (304) 926-0499 ext. 1654.

James Martin

Chief

Operator's Well No: WM. FERRELL #4

Farm Name: FRIEND, CHARLES E. & LAURA

API Well Number: 47-9500566

Permit Type: Plugging
Date Issued: 01/06/2014

Promoting a healthy environment.

PERMIT CONDITIONS

West Virginia Code § 22-6-11 allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

CONDITIONS

- 1. All pits must be lined with a minimum of 20 mil thickness synthetic liner.
- 2. In the event of an accident or explosion causing loss of life or serious personal injury in or about the well or while working on the well, the well operator or its contractor shall give notice, stating the particulars of the accident or explosion, to the oil and gas inspector and the Chief within twenty-four (24) hours.
- 3. Well work activities shall not constitute a hazard to the safety of persons.

WW-4B Rev. 2/01

1) Date Septe	,	20 13		
2) Operator	's			
Well No.	Wm. Fe	rrell # 4		
3) API Well	No.	47-095		- 0566

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS

4)		MIT TO PLUG AND ABANDON
	Well Type: Oil X / Gas X / Liqui (If "Gas, Production or Un	d injection/ Waste disposal/ derground storage) Deep/ Shallow_X
5 \	995'	Watershed Elk Fork
5)	Location: Elevation 885'	Watersned Like Oik
	District Ellsworth 02	County Tyler 95 Quadrangle Porters Falls 654
	Triad Hunter LLC	Simberly Arnold
6)	Well Operator Triad Hunter LLC	7) Designated Agent Kimberly Arnold
	Address 125 Putnam Street	Address P.O. Box 154
	Marietta, Ohio 45750	Waverly, WV
8)	Oil and Gas Inspector to be notified	
	Name Joe Taylor	Name
	Address 497 Claylick Road	Address
	Ripley, WV 25271	
	(SEE ATTACHMENT)	
		RECEIVED Office of Oil and Gas 0CT 8 0 2013
		Office of Oil and Gas 0CT 3 0 2013
		Office of Oil and Gas

PLUGGING PROCEEDURE

ELK FORK FIELD

Ellsworth District, Tyler County

- 1. MIRU service rig, dig flow back pit, and remove pumping unit if necessary.
- 2. Pull tubing and rods OOH and clean hole to total depth.
- 3. Run 2 3/8" 8rnd tubing to the base of the shot hole or pay zone, or TOP OF PACKER,
- 4. Mix/Pump 75 sacks Class A Cement, ¼ lb. flocele/sk., 1% CaCl, through the tubing into the shot hole (Plug # 1 - 88.5 cu.ft.).
- 5. Pull tubing up to 1,000 feet and shut down for the day.
- 6. Lower tubing and tag the top of the cement plug. Mix additional cement to cover the shot hole if necessary.
- 7. Pull casing (-5.3/16", -6.4", 6.5/8") OOH, or cut-off / shoot apart casing around 500 feet above the Keener Formation or pay zone and pull it OOH.
- 8. RIH with 2 3/8" 8rnd tubing to the top of the cut-off casing or 500 feet above the Keener Fm./pay-zone.
- 9. Mix/Pump 60 sacks Class A Cement, ¼ lb. flocele/sk., 1% CaCl through the tubing into the annulus (Plug # 2 - 68 cu.ft., 200' lin. ft.).
- 10. Pull tubing up-hole to set surface hole plug as follows: (Assume Hole Size = 10")

	(Elevation)	(Plug Depth)	(Cement Required)	(Cubic Feet)
	Below 800 feet	100'	50 sacks	54.5
×	800' to 900'	150'	70 sacks	82.0
	900' to 1,000'	200'	95 sacks	109.0
	Over 1,000 feet	250'	116 sacks	136.5

- 11. Mix/Pump (Plug # 3) the surface hole plug with Class A Cement, ¼ lb. flocele/sk., 1% CaCl, through the tubing until cement is circulated to surface. Pull tubing OOH.
- 12. Top load hole with Class A Cement and install monument casing so that it is 3' above ground level.
- 13. Weld identification plate on monument pipe and fill monument pipe with Class A Cement.
- 14. RDMO service rig and surface equipment.
- 15. Reclaim well site and lease road.

Note! Mix / Pump gel spacers between all cement plugs.

RELEASE PACKER AND PULL 53/16" OUT OF HOLE CK SHOOF POUR 53/16" ABOUE

PLUC FROM 935' - 835' SET WITH CEMENT WITH NO MORE THAW 3% CaCl2

(Well Information)

	ELK FORK FIELD						
Permit Number: 47-095-0566	Well Name : Wm. Ferrell #4						
District: Ellsworth	County: Tyler						
Date Drilled :N/A	Total Depth : 1811 Elevation : 885						
Producing Zone : <u>Keener</u>	Shot Hole Depth : 1797 - 1801						
Casing Depths: 10"	8 ¼" Tubing Depth: 2"						
6 5/8" <u>1590'</u>	6 ¼"						
5 3/16" <u>1609</u>	4 7/8"						
Remarks: 53/16" Seton H.W. Packer	-						
Top keener 1787' Oil	I@ 1795 '						
(50P-)	Shot I time (UNKNOWN)						

47-095-0566

Elev	885'		NAME OF TAXABLE PARTY.			V		H.No.3621
EASE NO.	725 AC	CRES	75	FARM NA	ME Wm.	Ferrell		WELL NO. 4
I. 6 S. Civil District County tate Count Rights Owned	Ellsworth Tyler W.Va.	13	Dr'g Co				Purchased From Date Purchased Sold To Date Sold Date Abandoned	H.C.&R. 3-1-43
	FORMATI	ON					CASING REC	ORD *
Kind	Top Bott	om Stee	el Line Meas.	Tests	Size	Bottom Casing Steel Line	Put in Well Tally Meas.	Pulled Cemented Tally Meas.
(eene r	1787				6-5/8" 53/16	1593	1590 / 60 9	Date Size Csg. Top " Bot. "
il il	1795 1800				School Section 1990	PA	CKERS AND	SHOES
						Cind 6'N/6" N/3	Size	Depth Set Date Set
						7	TORPEDO RE	CORD
	is the				Date 7 -19	No. (Qts. Size Shell To	p Shot Bottom Results
Total Depth	n n	311			10	No. (Qts. Size Shell To	p Shot Bottom Results
Total Depth	1.0	311			10	No. (Qts. Size Shell To	p Shot Bottom Results
Total Depth	1.0	311			10	No. (Qts. Size Shell To	p Shot Bottom Results
rotal Depth	11	311			10	No. (Qts. Size Shell To	p Shot Bottom Results
Total Depth	1.0	311			7-19	No. (Qts. Size Shell To	p Shot Bottom Results EPER Final Depth Contractor
Total Depth	11	311			7-19	No. (-56 20	Qts. Size Shell To	p Shot Bottom Results EPER Final Depth Contractor
Total Depth	1.0	311			7 -19	No. (-56 20	ORILLING DE Original Depth	p Shot Bottom Results EPER Final Depth Contractor RECORD
Total Depth	1.0	311			7 -19	No. (-56 20	ORILLING DE Original Depth	p Shot Bottom Results EPER Final Depth Contractor RECORD
Total Depth			★ 30 Days A	fter *	7 -19	No. (-56 20	ORILLING DE Original Depth	P Shot Bottom Results EPER Final Depth Contractor RECORD PLUG Size Kind Depth
Initial Prod.			★ 30 Days A	free *	7 -19	ed Comp ABA	ORILLING DE Original Depth	P Shot Bottom Results EPER Final Depth Contractor RECORD PLUG Size Kind Depth

WVGES O&G Record Reporting System



Select County:	(095) Tyler	•	Select datatypes: (Check All)						
Enter Permit #:	0566		✓ Location	✓ Production	Plugging				
	1 (0.77)		Owner/Completion	Stratigraphy	✓ Sample				
Get Data	Reset		Pay/Show/Water	✓ Logs	✓ Btm Hole Loc				

WV Geological & Economic Survey:

Well: County = 95 Permit = 0566

Report Time: Thursday, February 14, 2013 4:03:13 PM

Location Information: View Map

[API COUNTY PERMIT TAX DISTRICT QUAD_75 QUAD_15 LAT_DD LON_DD UTME UTMN 4709500566 Tyler 566 unknown unknown unknown

There is no Bottom Hole Location data for this well

Owner Information:

[API CMP_DT SUFFIX STATUS SURFACE_OWNER WELL_NUM CO_NUM LEASE LEASE_NUM MINERAL_OWN OPERATOR 4709500566 4-/- Original Loc Completed William Ferrell 4 PROP_VD PROP_TRGT_FM

TYPE RIG CMP not available unknown unkn CMP_MTHD TVD TMD NEW_FTG G_BEF G_AFT O_BEF O_AFT P

There is no Pay data for this well

Production Cas Information

API	OPERATOR	PRD YEAR	ANN GAS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DCM
4709500566	Pennzoil Company	1981	-	0 0	0	0	0	0	0	0	0	0	0	0	0
4709500566	Pennzoil Company	1982		0	0	0	0	0	0	0	0	0	0	0	0
4709500566	Pennzoil Company	1983		0	0	0	0	0	0	0	0	0	0	0	0
4709500566	Triad Resources, Inc.	2001		5 0	0	0	0	0	5	0	0	0	0	0	0
4709500566	Triad Resources, Inc.	2003	1	10	0	0	0	0	0	0	0	0	0	0	0
4709500566	Triad Resources, Inc.	2004		0 0	0	0	0	0	0	0	0	0	0	0	0

Production Oil Information

API	OPERATOR	PRD YEAR	ANN OIL	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DCM
4709500566	Pennzoil Company	1981	585	0	0	0	0	0	0	0	0	0	0	0	0
4709500566	Pennzoil Company	1982	135	0	0	0	0	0	0	0	0	0	0	0	0
4709500566	Pennzoil Company	1983	56	0	0	0	0	0	0	0	0	0	0	0	0
1709500566	Triad Resources, Inc.	2001	0	0	0	0	0	0	0	0	0	0	0	0	(
4709500566	Triad Resources, Inc.	2003	0	0	0	0	0	0	0	0	0	0	0	0	
4709500566	Triad Resources, Inc.	2004	0	0	0	0	0	0	0	0	0	0	0	0	

There is no Stratigraphy data for this well

There is no Wireline (E-Log) data for this well

There is no Plugging data for this well

There is no Sample data for this well

RECEIVED Office of Oil and Gas

OCT 3 0 2013

WV Department of Environmental Protection



WW-4A Revised 6-07

1)	Date:	September 19, 2013
2)	Operator's V	Well Number
	Wm. Ferrell # 4	

3) API Well No.: 47 -

95 - 0566

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF APPLICATION TO PLUG AND ABANDON A WELL

4) Surface Own	ner(s) to be served: 5	(a) Coal Operator	
(a) Name	Charles E. and Laura L. Friend V W		/A
Address	RR 1 Box 192A	Address _	
	Middlebourne, WV 26149		
(b) Name		(b) Coal Owner	r(s) with Declaration
Address			/A
		Address	
(c) Name		Name	
Address		Address	
6) Inspector	Joe Taylor	(c) Coal Lessee	with Declaration
Address	497 Claylick Road	::	/A
	Ripley, WV 25271	Address	
Telephone	(304) 380-7469		
	-	_	
(2) The p The reason y However, yo Take notice accompanyin Protection, y the Applicat	that under Chapter 22-6 of the West Virginia Cong documents for a permit to plug and abandon with respect to the well at the location described	rights regarding the application ode, the undersigned well oper a well with the Chief of the Of l on the attached Application a ed or certified mail or deliver	ator proposes to file or has filed this Notice and Application and fice of Oil and Gas, West Virginia Department of Environmental and depicted on the attached Form WW-6. Copies of this Notice, ed by hand to the person(s) named above (or by publication in
			Office of Oil and Gas
	Well Operato	r Triad Hunter LLC	
	By:	Rocky Roberts	an Cm 7 OCT 8 0 2013
	Its:	Senior VP Appalachian O	perations
	Address	125 Putnam Street	WV Department of
	m 1 1	Marietta, Ohio 45750	VV T Croper and Chartestian
	Telephone	(740) 374-2940	RIA/Environmental Protection
Subscribed and s	seth 12 Ills	day of Splenke	Public Pu
Oil and Gas Priva	cy Notice		ATE OF ON

The Office of Oil and Gas processes your personal information, such as name, address and phone number, as a part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use of your personal information, please contact DEP's Chief Privacy Officer at depprivacyoffier@wv.gov.



SURFACE OWNER WAIVER

Operator's Well Number

Wm. Ferrell #4

INSTRUCTIONS TO SURFACE OWNERS NAMED ON PAGE WW4-A

The well operator named on page WW-4A is applying for a permit from the State to plug and abandon a well. (Note: If the surface tract is owned by more than three persons, then these materials were served on you because your name appeared on the Sheriff's tax ticket on the land or because you actually occupy the surface tract. In either case, you may be the only owner who will actually receive these materials.) See Chapter 22 of the West Virginia Code. Well work permits are valid for 24 months. If you do not own any interest in the surface tract, please forward these materials to the true owner immediately if you know who it is. Also, please notify the well operator and the Office of Oil and Gas.

NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.
WHERE TO FILE COMMENTS AND OBTAIN ADDITIONAL INFORMATION:

Chief, Office of Oil and Gas
Department of Environmental Protection
601 57th St. SE
Charleston, WV 25304
(304) 926-0450

<u>Time Limits and methods for filing comments</u>. The law requires these materials to be served on or before the date the operator files his Application. You have FIVE (5) DAYS after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

Comments must be in writing. Your comments must include your name, address and telephone number, the well operator's name and well number and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

The Chief has the power to deny or condition a well work permit based on comments on the following grounds:

- 1) The proposed well work will constitute a hazard to the safety of persons.
- 2) The soil erosion and sediment control plan is not adequate or effective;
- 3) Damage would occur to publicly owned lands or resources;
- 4) The proposed well work fails to protect fresh water sources or supplies;
- 5) The applicant has committed a substantial violation of a previous permit or a substantial violation of one or more of the rules promulgated under Chapter 22, and has failed to abate or seek review of the violation...".

If you want a copy of the permit as it is issued or a copy of the order denying the permit, you should request a copy from the Chief.

VOLUNTARY STATEMENT OF NO OBJECTION Office of Oil and Gas

I hereby state that I have read the instructions to surface owners and that I have received copies of a Notice and Application For A Permit To Plug And Abandon on Forms WW-4A and WW-4B, and a survey plat.

I further sta objection to a permit FOR EXECUTION I	being issued on thos	se materials.	e planned wor	rk described in these ma	nterials, and I have no BY A CORPORATION,
ETC.	,				
X Charles Z	Lucro	Date 10/	18/13 Name		
Signatu	re		By		
			Its		Date
				Signature	Date

WW-9 Rev. 5/08

	Page 1	of 2	
API Number 47 -	. 095	_ 0566	
Operator's Well N	O. Wm. Fe	rrell # 4	

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS

CONSTRUCTION AND RECLAMATION PLAN AND SITE REGISTRATION APPLICATION FORM GENERAL PERMIT FOR OIL AND GAS PIT WASTE DISCHARGE

Operator Name_Triad Hunter LLC	OP Code
Watershed_ Elk Fork	Quadrangle Porters Falls
Elevation _ 885' (GPS 899') County_Tyl	er _{District} _Ellsworth
Description of anticipated Pit Waste: _saltwater, oil,	gel, and freshwater
Will a synthetic liner be used in the pit? yes 20 4	MIL,
Reuse (at API NumberOff Site Dispposal (Supply fo	Permit Number_UIC # 2D0855151) rm WW-9 for disposal location)
Proposed Work For Which Pit Will Be Used: Drilling Workover Other (Explain	Swabbing Plugging
on August 1, 2005, by the Office of Oil and Gas of the W provisions of the permit are enforceable by law. Violat law or regulation can lead to enforcement action. I certify under penalty of law that I have persapplication form and all attachments thereto and that obtaining the information, I believe that the information penalties for submitting false information, including the Company Official Signature	Office of Oil and Gas
Company Official (Typed Name) Rocky Rober	ts 0CT 3 0 2013
Company Official Title Senior VP Appalac	chian Operations W// Department of Environmental Protection
Subscribed and sworn before me this 24th day	voi September, 2013
Etycbeth R- Jeby My commission expires	Notory Public ELIZABETH R. TEBAY NOTAEY PUBLIC In and for the State of Chio In Contemposite unjugs
	2-24-10

L	EGEND	
Property Boundary	Diversion ()	111111111111111111111111111111111111111
Road = = = = = = = = =	Spring	
Existing Fence — X — X — X —	Wei Spoi	
Planned Fence / / /	Drain Pipe with size in inches	— ⁽³ —
Stream	Waterway \longleftrightarrow	\Leftrightarrow
Open Ditch	Cross Drain	
Rock ESESSE	Artificial Filter Strip XXXXXX	XXXXXXXXXXX
North N	Pit: cut walls	4
Buildings	Pit: compacted fill walls	rest.
Water wells	Area for Land Application of Pit Was	
Drill site	(Free Property of the Property	
Proposed Revegetation Treatment: Acres Disturbed One +	rrevegetation pri	5
	cre (500 lbs minimum)	
Mulch 90 - 100 bales / acre Tons/ac	re	
Seed	Mixtures	
A man I	Area II	
Area I Seed Type Ibs/acre	Seed Type	lbs/acre
Orchard Grass 30%	Orchard Grass	30%
Rye (Annual & BT) 35%	Rye (Annual & BT)	35%
Timothy (Climax) 25%	Timothy (Climax)	25%
Clover (Medium Red) 10%	Clover (Medium Red)	10%
Attach: Drawing(s) of road, location,pit and proposed area for land appli	cation.	
Photocopied section of involved 7.5' topographic sheet.		
Plan Approved by:		
Comments:		
Comments:		, <u> </u>
Title: Inspect	Date: 10-2-17	
Field Reviewed? () Yes () No	
Liela Keviewea:	_/	

DELORME XMap® 7 800 School No 3 BM 787 Wm. Ferrell #4 095-0566 1200-900 Environmenta 11090 Scale 1: 12,000 Data use subject to license. MN (8.3°W) © DeLorme. XMap® 7. www.delorme.com 1" = 1,000.0 ft Data Zoom 13-5



West Virginia Department of Environmental Protection Office of Oil and Gas

WELL LOCATION FORM: GPS

_{API:} 47-095-0566	WELL NO.:_4			
FARM NAME: Wm. Ferrel				
RESPONSIBLE PARTY NAME: Triad Hunter, LLC				
COUNTY: Tyler	DISTRICT:_Ells	sworth		
QUADRANGLE: Porters Falls				
SURFACE OWNER: Charles E. and Laura L. Friend				
ROYALTY OWNER: Shiben Estates Inc.				
UTM GPS NORTHING: 4374751.1487065				
UTM GPS EASTING: 512843.73838727 GPS ELEVATION: 899'				
The Responsible Party named above has chosen to submit GPS coordinates in lieu of preparing a new well location plat for a plugging permit or assigned API number on the above well. The Office of Oil and Gas will not accept GPS coordinates that do not meet the following requirements: 1. Datum: NAD 1983, Zone: 17 North, Coordinate Units: meters, Altitude: height above mean sea level (MSL) – meters. 2. Accuracy to Datum – 3.05 meters 3. Data Collection Method: Survey grade GPS: Post Processed Differential				
Real-Time Differential				
Mapping Grade GPS X: Post Processed Differential X				
Real-Time Differential 4. Letter size copy of the topography map showing the well location.				
I the undersigned, hereby certify this data is correct to the best of my knowledge and belief and shows all the information required by law and the regulations issued and prescribed by the Office of Oil and Gas.				
Ber Imether	Geologist	4/15/2013		
Signature	Title	Date		